

### Abstract of the Disclosure

A hardware/software system is provided for allocating memory in the form of a buffer zone surrounding a data packet to be stored in the memory.

5 The hardware/software system comprises, first and second registers for storing separate values representing in one register, an amount of memory preceding the first line of the data packet to be stored and in the other the amount succeeding the last line of the packet to be stored, a hardware mechanism for allocating the memory according to computational results  
10 computed using the register values and the size of a data packet to be stored, and software for processing stored data packet and for writing any new growth data into the designated buffer zones surrounding the data packet.